

Meshless method for solving a free boundary problem associated with obstacle

DaMing Yuan, XiaoLiang Cheng

Summary

In this paper, we discuss the numerical method for solving the first kind of elliptic variational inequality. We first use the fundamental solution as the basis function to approximate the solution of variational inequality, then we employ the Uzawa's algorithm to determine the free boundary and the solution. Numerical examples are given to testify the efficiency of the method.

